

EMERGENCY DRINKING WATER TREATMENT

Where would you get water if none came out of your tap? Most people take good water for granted, but if an emergency disrupts your normal drinking water supply you may have to find your own. If you drink unsafe water you will soon be spending most of your time and energy treating sick people, including yourself. Water from ponds, lakes, streams, rainwater runoff from roofs, dirty snow, wells that have been flooded or damaged or municipal (city) water systems that have been damaged or polluted MUST be treated to make the water safe to drink.

Questionable water must be treated by boiling or through the use of chlorine or iodine products that you may have in your home. If the water has gasoline, oil, antifreeze, soap, detergent, pesticides or other poisonous chemicals in it, you cannot drink it at all. You will have to find another water source.

To make water safe to drink you must first remove as much of the solid stuff from it as you can. You can pour the water through a coffee filter, or several layers of clean cloth, like a towel or t-shirt. You can also strain the water through a bucket with small holes in the bottom. Put a foot of compressed clean dry grass or straw or six inches of clean sand inside and press it down so that the water cannot flow around it, but has to flow through it. This will remove most of the solid stuff so you can more safely treat your water. Change the grass or sand at least every other day.

BOILING WATER If you have fuel then water for drinking, cooking and washing dishes can be boiled. This will kill all harmful bacteria, viruses and other microorganisms that can make you sick. Any food container that won't melt can be used, but large cooking pots work best. All water should be brought to a rolling boil (lots of breaking bubbles) for at least one minute. (High altitude: For every one thousand feet above sea level you are at, add one minute to the boiling time.) If you are going to drink the water, let it cool first. The water will taste "flat" so it may taste better if you pour the water from one clean container into another, or shake it vigorously to put some air into it. Keep the water in clean containers or it will become contaminated and need to be boiled again before you can drink it.

CHLORINE If you have plain, unscented, uncolored laundry bleach you can use it to disinfect drinking water. For every gallon of clear water add eight drops of bleach, stir well and wait thirty minutes before drinking. If the water is cloudy or cold then double the amount of bleach (16 drops) added to the water. After the thirty minutes are up you should be able to faintly smell the bleach in the water. If not, add eight more drops, stir and wait another fifteen minutes.

If you have a swimming pool, hot tub, or jacuzzi and have dry chlorine you may be able to use it to disinfect water. Read the chlorine container label carefully. Calcium hypochlorite should be the only active ingredient and nothing else. If so, make a disinfectant solution by mixing one-half teaspoon of the dry chlorine into 2-1/2 quarts of clear water until it is dissolved. Don't drink it, but use one cup of this solution to disinfect five gallons of clear water. If the water is cloudy

or cold, use two cups in five gallons. Stir well and let sit for thirty minutes before using. When the time is up, the water should smell faintly of chlorine. If it doesn't, add another cup of solution, stir and wait fifteen minutes.

If you don't like the smell or taste of the chlorine let the water sit open on the kitchen counter overnight or pour from one clean container into another until the smell is gone.

IODINE If you don't have bleach, but do have tincture of iodine you may use it to disinfect water. The label should say that it is "2% US Pharmacopoeia (USP) strength". Add eight drops of iodine to every quart of clear water, stir and wait fifteen minutes before using. If the water is cloudy or cold, add eight drops and wait thirty minutes before using.

WARNING: DON'T drink water treated with iodine if you are pregnant or have thyroid problems. Anyone with a weak or suppressed immune system should use only boiled water because they can get diseases that healthy people will not get from iodine or chlorine treated water. Snow should be melted first in clean containers before using it as a source of drinking water. If the snow is dirty, disinfect it using one of the methods mentioned above.